APRIL 16, 2015

Hamilton County Highway Department 1700 S. 10th Street Noblesville, Indiana

President Heirbrandt called the meeting to order at 10:00 a.m. with a quorum present of Commissioner Christine Altman, Commissioner Steven C. Dillinger and Commissioner Mark E. Heirbrandt.

SR 37 ECONOMIC IMAPCT STUDY

SR 37 Economic Impact Study

Mr. Chandler Duncan of Economic Development Research Group, Inc. (EDRG) reviewed a draft of the Economic Impact of State Road 37 Roundabout Interchange Improvements.

Executive Summary by Economic Development Research Group:

Hamilton County, Indiana, is considering an improvement to nine (9) intersections on State Route 37 (SR 37) between Fishers and Noblesville. This 5.7 mile stretch of improvements involves the conversion of traditional signalized intersections to continuous flow roundabout interchanges. These roundabouts are anticipated to improve the transportation performance of the corridor through improved travel time, reduced congestion, and enhance safety. They will reduce total vehicle-hours traveled (VHT) along the corridor by 947 thousand hours per year by the 25th year from inception, while eliminating the conditions in which traffic incurs the cost of "congested¹" travel conditions (currently which would otherwise affect 81% of traffic on the corridor by 2040).

The transportation enhancements translate into substantial economic benefits (e.g., reduced travel times, improved reliability, lower vehicle operating costs, reduced crashes and reduced emissions, valued at a total of \$390.6 Million in present value terms). When compared to total project costs, the project has a benefit-cost ratio of 2.2 (in present value terms).

Finally the project is anticipated to have impacts on the regional economy, with the \$390.6 Million worth of benefits (in addition to the spending of construction outlays) stimulating \$725 Million in new cumulative output (business sales) in the first 25 years after project inception. As a result of the project, in the same 25 year period, the gross regional product (GRP, or value added) is expected to increase cumulatively by \$399 Million, of which \$294 Million is expected to be experience in terms of additional employee wages. Construction of the project is expected to generate 635 jobs in the fourth year after inception (the peak of construction). Once constructed, the transportation performance benefit of the project is expected to continue to generate and sustain 130 permanent jobs by the seventh year after inception rising to 172 permanent jobs by year 25².

¹Congestion for the purposes of this study is defined as a level of service "D" or below. This is a level of performance at which fuel efficiency, vehicle operating costs and reliability are known to incur significantly higher costs than in uncongested conditions.

²Anaylysis assumes a compound annual traffic growth rate of 1.42%

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PowerPoint Presentation presented by Duncan Chandler:

- Overview
 - Key Sources of Economic Benefit and Impact
 - Project Economic Benefits and Costs
 - Wider Economic Impacts
- Benefits and Impacts
 - Economic Benefits
 - Business or Household Savings of Transportation Costs
 - Increases in Business Productivity
 - Always Expressed in Dollar Terms
 - Must result directly from an improvement in transportation performance
 - Discounted (3%) to allow for tradeoffs relative to project costs
 - Economic Impacts
 - What the economy "does with the benefit"
 - Expressed in terms of jobs, dollars of income, business sales or GDP
 - Also includes the effects of construction outlays
- Sources of Economic Benefit
 - Lower Vehicle Operating Costs
 - 81% of peak period traffic occurs under congested conditions (in year 25)
 - Congested conditions have higher fuel and vehicle maintenance costs (per mile)
 - These conditions are eliminated by the project
 - Less Time Spent Traveling (in year 25)
 - 946,781 annual hours of peak period intersection delay at intersection (in year 25)
 - Time has a per-hour cost (per USDOT)
 - Delay resolved through roundabout interchanges
 - Improved Reliability
 - In addition to higher operating costs for drivers and carriers, congested conditions result in higher "uncertainty windows" of arrival times at the destination imposing costs on manufacturing and service operations
 - "Buffer Time" has a per-hour cost (determined by TTI "Buffer Time Index"
 - From "may arrive within a 30 minute window" to "may arrive in a 10 minute window"
 - o Improved Safety
 - Injury and Fatality Rates much lower, property damage comparable
 - Based on Keystone Parkway Experience

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Present Value of Economic Benefits

Economic Benefit	Value (\$ Million)	Percent Total
Business Travel Time & Reliability (present value, M\$)	\$199.9	51.2%
Household Travel Time & Reliability (present value, M\$)	\$170.3	43.6%
Vehicle Operating Costs (present value, M\$)	\$17.5	4.5%
Safety (present value, M\$)	\$2.8	0.72%
Environmental (present value, M\$)	\$0.16	0.04%
Total Benefits (present value, M\$)	\$390.6	
Total Costs (present value, M\$)	\$177.6	
Net present value	\$213.0	
Benefit-cost ratio	2.20	

Measures of Economic Impact

- Business output
 - Business output represents the value of annual industry production in producer prices. For manufacturers, this would be sales accounting for change in inventory. For service sectors, production is the same as sales. For retail and wholesale trade, output is gross margin and not gross sales.
- Value added
 - Value added is the value of output less the value of intermediate consumption. It is a measure of the contribution to GDP made by an individual producer, industry or sector.
- o Jobs
 - Job totals are an estimate of impacts on employment level. This is expressed as 'job-years,' where a job is one individual employed in a position for one year. One individual employed for two years would constitute two 'job-years.'
- Wage income
 - Wage income, also known as employment income, includes employment compensation and proprietor income.

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• Economic Impacts

Project	Value (\$M)
Cumulative Output (Constant 2014 M\$)	\$725
Cumulative Value Added / Gross Regional Product (Constant 2014 M\$)	\$399
Cumulative Earnings / Wage Income (Constant 2014 M\$)	\$294
Construction Jobs (employees in peak construction year)	635
Long-term jobs (employeesby 2040)	172

Conclusions

- Roundabout Interchange improvements have a significant and positive return on investment
 - \$2.2 of societal benefit for each \$1 spent
 - 45% of travel time savings accrue to households (reflecting quality of life effects)
- Project improves economic efficiency and contributes nearly \$400 Million to regional GDP in first 25 years
 - \$725 Million in Business output
 - \$294 Million in Wage Income
 - 172 Permanent Jobs by Year 25

Discussions:

Altman asked Duncan if they factored in a growth in inflation, do a gross and discount it back? Duncan replied no, the costs are represented in 2014 dollars. Altman asked if it would be appropriate to put in an inflation factor? Duncan replied the accepted best practice when doing benefit cost analysis is doing in current dollar terms, you could add a cost escalation factor on the outlay if you wanted but then you would need to use the cost escalation factor for your benefits as well. That analysis could be done if they would like to choose an escalation factor for the outlay and benefit. Typically the factor would fall between 3%-4% depending on the Consumer Price Index (CPI) for the area and the nature of the outlay. The Commissioners agreed the report should show current dollar and then with inflation.

Heirbrandt asked if the report shows any savings from removing the traffic signals, electric use and maintenance, etc.? Duncan replied yes they applied an annual operating and maintenance estimate and compared it with the project verses without the project. That amount was a little higher without the project and the difference was taken into account in the cost stream.

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Dillinger asked if they factored in the population growth of Hamilton County factored over a 25 year period? Duncan replied they did and it is reflected in the traffic growth rate. What is driving the costs savings is the number of vehicles using that corridor.

Discussion of the 1.42% traffic growth rate was held. Mr. Greg Kicinski replied the engineers had used 1.7% (based on a 2010 mobility study in concert with the Indianapolis Metropolitan Planning Organization (MPO).

Duncan suggested adding a technical appendix that has a sensitivity analysis that shows a couple of different scenarios for traffic growth rate and cost escalation.

Kicinski asked if they came up with their own modeling to determine the amount of delay for a signalized condition or was the data used that was already produced? Duncan replied they used the engineering model. Mr. Matt Taylor reported that information came from the MPO Mobility Study.

Altman stated the year of the Mobility Study was 2012, what year data was used? Mr. Dave Richter believes it was 2010. Altman pointed out that was during the peak of the recession. Taylor suspects the traffic volumes used for the analysis were based on a forecast of 20 years, which is a common practice. Kicinski reported they did a count on one intersection (126th and SR 37) to confirm what had happened over the four-year period and it gave us the same data which indicated that not much had happened in regards to growth in that area over that period of time.

Mr. Brad Davis verified when looking at the travel time savings and the benefits, they are for the side street traffic as well as SR 37 traffic? Duncan replied yes, it applies to all approaches.

Mr. Mike McBride asked for more detail of how the value of the benefits of safety improvements was calculated. Duncan stated the safety benefit is derived by having the stream of traffic volume over a 25 year period; there is an existing rate per million Bench Marketing Test (BMT), a rate of fatalities, how many injuries and how many property damages over a five year crash history. To understand the likely change in those rates when going from intersection to interchange design they looked at Keystone Parkway, historically how did that crash rate change and it was assumed after the building of this that the rates would change similar to how the rates changed on Keystone Parkway. Those lower rates were applied to the SR37 corridor for a 25 year period after the build. There difference between the numbers of injuries/fatalities was calculated and then there is a dollar value from federal accepted standards applied to the number of incidents reduced yielding the number of dollars per year and then yielding the present value. McBride asked if the percentages of injury accidents and fatalities based on actual crash data you acquired or were they assumed? Duncan replied in the SR 37 project they were based on federal sources that are built into their model.

Richter asked for clarification on the number of long term jobs created, if he adds up the number of jobs created from year 1 to year 25 it totals 4,417, would it be fair to say that 4,417 jobs were created as a

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result of this project? Duncan replied no, if 100 jobs were created tomorrow with each person earning \$1,000 that would be a cumulative \$100,000, then the next year that same 100 people would be working earning an additional \$100,000 so over two years the cumulative impact would be \$200,000 but it is still 100 jobs. Duncan reported the jobs listed in Appendix A should be interpreted that in year 1 there is 1 job created, in years 4-6 would be a lot of construction activity, with 635 only working in year 4 with those jobs going away in year 5. This column is tracking the additional employment level in Hamilton County from year to year. The employment level goes up and down over a period of time. These numbers are reporting the number of people in any given year that are working that would not otherwise be working if the project was not done, it is not giving you the number of new jobs created.

McBride asked if there any consideration in the report if the project does not happen in regards to job decline as a result of congestion? Duncan replied the way the economic impact analysis is done is we create a Case K and you forecast the Case K conditions, there are certain transportation costs that occur under Case K conditions and those costs are assumed to occur. Then when you introduce the project case you allow those costs to be reduced based on what the engineering analysis tells us. This is allowed to be reduced based on how much congestion the project takes away and then we allow those costs to go down and then allow those savings to accrue to households and businesses. Every economic impact analysis always represents the difference over time between a build case and a no build case. The build case always represents the full set of transportation costs that would accrue if you did not do the project.

McBride stated it appears from the detail in the jobs creation just described that the assumption of this study is that the property use along the corridor is more or less static, is that correct? Duncan replied yes. There is another element if you want to look at economic impact; there are four different things that can generate impact with one of them being construction outlays, another is long-term transportation efficiencies, another source of potential impact is contingent development (showing specific sites along the corridor that would attract additional economic activity that would not have been otherwise happening in the economy) and the final is a market access analysis where business could be more productive because more workers can reach the business. In the case of this study we did not do the contingent development or market access analysis. We just did transportation efficiency and construction impact, which is what these numbers represent.

Heirbrandt stated you mentioned the contingent market analysis, would this scenario play into that; we have a significant amount of people who avoid SR 37 taking alternative routes because of the congestion; is that part of what you mean by contingent market analysis? Duncan replied no, what is happening is people are diverting to avoid congestion than they are driving additional mileage and spending additional time and that is covered under the transportation efficiency part of the analysis. The contingent development analysis would be in order to have a contingent development impact you have to be able to say if any of those people would not live or work in Hamilton County their jobs would not be there, they would move away or business would not come to the county.

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McBride asked when you say in that economy how big a geographic area in this case study are we talking about? Duncan replied in this case he thinks they picked two counties, Hamilton County and one adjacent county (he thinks Madison County) he will have to check the model. McBride stated the contingent development analysis is intriguing to him, based on where this corridor is based in the region and the value of that property with a functional corridor the properties are highly under-utilized in the highly functional corridor. Because we have the congestion issues that we do today he would argue the communities that control the land use would not propose densification or redevelopment of under-utilized land because there is not a lot of market for it because the corridor does not support it. Duncan stated the key to that would be that if you had a situation where you had some land and the congestion on this corridor is keeping that land from developing and the business activity that would come to that land would otherwise not be in the regional economy, you can attract jobs from somewhere else, not just across town but from another city or a different economy system. If you can show that in no way jobs would come to this local or regional economy otherwise then you can have a future development claim

Altman asked on this type of analysis how credible it is; it seems you would have to use so much speculation. Are there ways to enhance the credibility or how do you come up with assumptions? Duncan replied it is always something you would have to be able and willing to defend. The decision of a business locating in a specific place is not something that any model can tell you. When they do a contingent development analysis they have an independent contingent development associate affiliated with their firm who is not involved in the other parts of the analysis, generally she will go out to the community, she will look at the site, she will talk to realtors and economic development people, look at the historic development of that community and then she will compare that to analogous site in other competing areas as well as other sites that similar projects have been done. Based on the combination of those factors as well as the underlying growth of the industry based in the area she will base a case that this area is ripe for development in this type of industry. The competing cities are not going to be able to compete with it or it will become much more competitive and then usually there is a fairly conservative share that is assumed overall statewide or regional industry growth that could to the area that would not otherwise come. Part of that is she has to rule out other types of communities that would attract that business. Altman stated the best thing we could do in our report is include a paragraph stating this was not taken into consideration, for our purposes it implies there is a whole now field of opportunity for use.

McBride asked if the 172 jobs are created in the two county economic areas that were considered as part of the study? Duncan replied right. The reason why the counties matter in this study has to do with the size of the benefits. It starts with number of dollars of savings the county has. Here is a certain mix of industries; different industries can do different things with transportation money. The two counties tells you what industry competition you have which determines the ratio of how many jobs a business could create in the long term per dollar savings. That ratio is what is determined by the county, 30 counties would not necessarily create a number bigger than 172 because it would be a different set of ratios. Underlying the assumption is that these impacts are not accruing somewhere in America because the

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benefit accruage of some passenger traffic would play off in some distance place, this is all accruing within your area because of transportation efficiencies.

Altman asked how does this rate with other traffic studies you have done? Duncan replied this is the first study they have done that has looked explicitly at conversions to roundabout interchanges. As we started getting into it we were fairly impressed that for such a small project with the amount of travel time and efficiency that you could pick up. When you look at the benefit cost ratio this study are very much in line with other significant congestion reduction projects that they see around the country. The ratio benefits to impact is fairly consistent; you have a little more with transportation savings due to the economic base, you have some industries that have pretty big multipliers in terms of how much they spend on transportation. It is interesting to go from peak period of 81% of the traffic having the operating costs of congested conditions and being able to reduce that appreciatively 25 years in the future, we don't see a lot of studies where we generate an impact from that. This is not unique but it is something we have never modeled before. Altman asked if that would be unethical to ask you to quantify that into a cover letter for us, to say this study is in line and has comparable impacts to other traffic investments; that is important if other people have not read this kind of information before and for our own benefit having the uniqueness of this solution having such a direct impact to the community is significant. Duncan would be happy to put that in a letter.

Action Required

- Duncan will check on the compound annual traffic growth rate listed as 1.42% in the report, it was reported to EDRG at 1.7% with another column at 2%.
- Provide a constant dollar projection with an inflation rate applied to the benefits applied to the impacts.
- Footnote or paragraph on the analysis that were not done as part of this study.
- EDRC to provide cover letter.

Comments

Dillinger stated he was very disappointed in this report, there was very little to help us sell the project in regards to future development. Altman and Davis replied this was not part of the scope of this project, which would be the contingent development analysis. Dillinger would also like to see the study with roundabout verses without comparison. Altman disagreed, if we add the cover letter the Governor wants to see is whether the State would be spending an inordinate amount of money with incomparable economic impact.

Richter suggested asking Duncan to add a column or information of what this corridor will look like if we don't do anything. Dillinger stated this is the comparison that is always brought up during discussions. The fear of doing this from the business community is very high. In order to sell this we need to discuss what happens if we do nothing. Altman stated to her that would be the same analysis in reverse, he may say fine but it will be at a cost. McBride stated it sounded like they analyze the no build

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or what the detrimental effect is as well as the positive effect if it is built and that is where they get the benefit in between. The report does not highlight the no build, it only highlights the benefit piece.

Heirbrandt asked Mr. Tim Monger what his thoughts are on this study? Monger replied one of the reasons for choosing this particular group is their experience with the Illiana analysis they did. They are an organization people go to. One of the things that surprised him was the 172 jobs, that seems to be low but if you think about the corridor as it is today, unless we see it drastically changing, there are still significant parcels of land available for development which would be part of the contingent study and it may be something the Commissioners want to consider to add what this would look like. The surprising finding was the time savings as a result of doing roundabout interchanges and is consistent with the benefit numbers. It is different than the River Ridge project where you can see the connection to the interstate makes a huge difference and people are making huge investments but this is also a lot of vacant land. Here we are talking about some vacant land. Kicinski stated along the corridor there is some vacant land but looking farther north those are the areas that would develop with the project that may not develop without. Monger stated in Noblesville's case there is the corporate campus which adds another dimension to the development of the corporate campus, how far did they look at the impact off of SR 37 and 146th Street is one of those areas that could change up because there would be two access points. This is consistent with other impact studies they have seen.

Taylor stated there is some benefit of having the study the way it is where it does not include the developments along the corridor because it gives it legitimacy rather than great, if you actually expect the developments to occur and they don't then what is your benefit cost? We know what it is because we have the number in this study.

Davis will discuss the additions to the study with Chandler.

HAND

Roper Capstone Additional Funding

Mr. Nate Lichti reported he had requested additional \$65,000 Community Development Block Grant (CDBG) funding for the Roper Capstone rehabilitation. Dillinger was for the request, Altman was against. Heirbrandt reported he looked at this building this week and would love to see it rehabilitated. Altman stated she is not disagreeing with the project; her position is that the county's CDBG funds are not for risk partners on the bad bids. It should be Hamilton County Area Neighborhood Development (HAND) on the profit taking they want to take out of the project. A contingency fund should have been included in the budget and she does not view these funds that need to be spread over the entire county as being the risk partner for a bad bid. Dillinger likes what they are doing, he does not think they are overcharging and we need to keep moving forward. Heirbrandt agreed with Dillinger. Dillinger moved to approve. Altman seconded. Dillinger and Heirbrandt approve. Altman opposed. Motion carried.

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Mr. Mark McConaghy reported from a Housing and Urban Development (HUD) perspective the \$100,000 is 10% of the project and in the case of a Community Housing Development Organization (CHDO) that money is expected to be used to future grants and to pay staff. This is a little different than a for profit business where the profit is for the owner. He has discussed possibly relabeling that in the budget. Altman stated this is for keeping the doors open, you can call it what you want you have to plan a project appropriately and include contingency funding.

NSP Grantee Close-out Certification

McConaghy requested President Heirbrandt's signature on the NSP Grantee Close-out Certification documents that were signed at the April 13th meeting by Vice President Dillinger, HUD requires the President's signature, not the Vice President's.

HIGHWAY BUSINESS

Highway Equipment Purchase from 2013 Bond

Davis reported the request to purchase additional highway equipment from the 2013 Bond was tabled on April 13th. Davis said out of the \$384,000 saved from the other equipment purchases from the Bond include \$104,000 of trade-in values of the equipment listed. Altman asked if there is any equipment on this list that would serve toward ours MS-4 regulations for cleaning the streets? Davis reported there is a motorized power broom which will sweep the street but will not pick up debris. They rent the vacuum equipment two times per year at a estimated cost of \$18,000 annually. The vacuums are very expensive, \$4 million, and the debris has to be disposed of correctly. Dillinger moved to approve. Altman seconded. Motion carried unanimously.

Fishers Fieldhouse

Neal reported the City of Fishers is building a Fieldhouse; we are in very preliminary discussions with Fishers about the access of 134th Street. Fishers is doing a traffic study right now, they will be approaching the county about doing either installing a traffic signal or roundabout at 134th Street and Olio Road. Heirbrandt stated if we help Fishers with this Westfield will be requesting help with 191st Street for Grand Park. Fishers has not asked for the county's financial help, it will just be for approval of a road cut. Altman stated she would prefer if we do anything it would be a roundabout.

House for Troops

Dillinger stated he has been contacted by Greg O'Conner and Jeff Zeckel regarding a problem that Corporal Zachary Nelson, who the veteran House for Troops is building a home for in Noblesville Township. The builder feels like he is getting the runaround by our Health Department Inspector regarding the septic and well permit. Dillinger has spoken with the builder and met with Barry McNulty, Director of the Hamilton County Health Department; Barry was not aware of any of this. We spoke with the inspector and did get the permit approved. The other issue was the Surveyor giving an outlet permit which has been issued. The Noblesville City Council has asked if the County would waive the fees for the septic and well. McNulty is willing to waive the fees but it will take Commissioner's approval.

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Altman moved to waive the fees for the septic, well and drainage outlet for this project. Dillinger seconded. Motion carried unanimously.

Meetings with County Council

Heirbrandt will ask Dan Stevens to send out possible dates for a joint meeting(s) with the County Council regarding personnel and the public safety training center. Heirbrandt asked who should be involved in presenting the public safety training center project to the Council? Dillinger and Altman agreed that Heirbrandt should make the presentation, as President. If Heirbrandt needs help with the presentation he should get that help. Altman reported she thinks we are close to having an interlocal agreement that everyone can agree with regarding the structure and governance. During the 911 Executive Board meeting it was discussed and those in attendance (Fishers Mayor Fadness, Noblesville Mayor Ditslear and Carmel Police Chief Green) were all ok with using the same structure that we have for the Public Safety Executive Committee. We do not need another meeting so the Executive Committee would meet for 911, adjourn that meeting and then if there are any issues with the training facility we would meet. Dillinger thinks the Commissioners need to meet to review items that may be issues and alternatives. Altman recommended Heirbrandt check with Mike Howard regarding the status of the interlocal agreement.

The Commissioners will meet on Wednesday, May 6, 2015 at 10:00 a.m. in Conference Room 1A for preliminary discussion of the public traffic safety training facility.

Signs

Heirbrandt reported the Plan Commission met regarding signs. Heirbrandt reported Mic Mead is distraught over the placement of a sign and threatened legal action. Dillinger replied when Mead gave his property to the county parks department he maintained the three acres of ingress and egress; Attorneys Mike Howard and Darren Murphy have determined that Mead can place a sign in that easement per the agreement in the life estate and that has been communicated to all involved.

Altman proposed the Commissioners re-think the sign ordinance; if the county has right of way within a jurisdiction controlled by another entity that has a sign ordinance we allow the sign placement.

Highway Meeting

The Commissioners cancelled the April 24, 2015 highway meeting.

Dillinger moved to adjourn. Altman seconded. Motion carried unanimously.

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Present

Christine Altman, Commissioner Steven C. Dillinger, Commissioner Mark Heirbrandt, Commissioner Dan Stevens, Director of Administration Dawn Coverdale, Auditor Kim Rauch, Administrative Assistant to Auditor Brad Davis, Highway Director Jim Neal, Highway Engineer Michael Hendricks, City of Noblesville Dave Richter, United Consulting Matt Taylor, United Consulting Greg Kicinski, American Structurepoint Tim Monger, Hamilton County EDC Mike McBride, American Structurepoint Chandler Duncan, (via phone) Economic Development Research Group, Inc. Mark McConaghy, Noblesville Housing Authority Nate Lichti, Hamilton County Area Neighborhood Development George Martin, ADA Advocate Jenni Jackson, ASL Interpreter

APPROVED HAMILTON COUNTY BOARD OF COMMISSIONERS

Christine Altman Steven C. Dillinger Mark E. Heirbrandt

ATTEST:

Dawn Coverdale	, Auditor
Date Approved:	4/27/15